DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022693 Address: 333 Burma Road **Date Inspected:** 09-Apr-2011

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** OBG

Summary of Items Observed:

CWI Inspector: Mr. Zhen Hua

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Wang Li, stencil 044772 used shielded metal arc welding procedure specification WPS-B-P-2213-TC-U4B-FCM-1 to make OBG segment 14E welds SEG3019V-011 and SEG3019W-001. This QA Inspector observed a welding current of approximately 175 amps, the base material had been preheated with electric heaters and Mr. Wang Li appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Kuai Wenshan, stencil 054013 used shielded metal arc welding procedure WPS-B-P-2213-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019M-003. This QA Inspector observed a welding current of approximately 170 amps the base materials were preheated with electrical heaters and Mr. Kuai Wenshan appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Mr. Zhao Guanglin, stencil 044779 used shielded metal arc welding procedure WPS-B-P-2212-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019AB-002. This QA Inspector observed a welding current of approximately 180 amps the base materials were preheated with electrical heaters and Mr. Zhao Guanglin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Jinjiu stencil 043661 used shielded metal arc welding procedure WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019AB-002. This QA Inspector observed a welding current of approximately 185 amps the base materials were preheated with electrical heaters and Mr. Wang Jinjiu appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Junping, stencil 501946 used shielded metal arc welding procedure WPS-345-SMAW-4G(4F)-FCM-Repair-1 to make repairs to various locations on floor beam FB3286A to 14E deck plate welds. This QA Inspector observed a welding current of approximately 170 amps and Mr. Yang Junping appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Zhang Min, stencil 215993 used submerged arc welding procedure specification WPS-B-T-2221-B-L2C-S-2 to complete OBG segment 14E groove weld SEG3019*-004. This QA Inspector observed a welding current of approximately 620 amps 27.0 volts and the base materials were preheated with electric heaters. Items observed on this date appeared to generally comply with applicable contract documents. See the attached photograph for additional information.

This QA Inspector observed ZPMC welder Mr. Zhu Jibo, stencil 055564 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 14E weld SEG3019V-005. This QA Inspector measured a welding current of approximately 280 amps, 26.5 volts, the base materials were preheated with electrical heaters and Mr. Zhu Jibo appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.



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Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer